## Radiochemical Analysis Request Sheet

## Instructions for Completing the Radiochemical Analysis Request Sheet

#### **Sample Identification Information**

This information is located in the upper left-hand shaded box. It must be filled out completely by the sampler.

**Project/Site No.**: The unique number that is assigned to the project by the program area/ sampling agency. This does not need to be filled out if there is no project or site number associated with the sample.

**Project Name**: The main name for the project. (For example DRH Monthly Monitoring, SEG Inspection, Clinch River Water Monitoring, DRH Weekly Air Monitoring.)

**Station Number**: The field number assigned by the sampler that uniquely identifies the point at which the sample was taken. (*For example W64 or 5*.)

**County**: Designated by the two-digit county code used by state agencies.

**Description**: A complete description of the location at which the sample was taken. The sampler log number is entered at this point. (For example SEG, Grassy Cr. @ Bear Cr Road/ROW-161.)

**Stream Mile**: The stream mile of a navigable river or stream. (For example 10.1 or 529.3)

**Depth**: May be the depth sampled for a core sample of soil or the depth at which a water sample was collected in a well or body of water. (*For example 15.0 feet.*)

**Collected: Date and Time** -- List the time in military time (24-hour clock time). This information is essential for radiochemical analysis for the determination of decay factors.

**Pick-Up Date**: Filled in only when the sampler is picking up a sample that has been previously collected by someone else. (*For example, a composite sample sequentially collected by plant personnel.*)

**Contact Hazard**: A listing of any known hazards related to the sample (radiological, chemical, biologic, etc.). **Do not put none**. Write **unknown** if you are not aware of a hazard.

**mR/hr Reading**: Must be listed to determine if the level of radioactivity exceeds the Radio-chemistry Section's guidelines.

**Sampler's Name**: Include the first and last name printed legibly.

Sampling Agency: The agency for which the sample was collected. (For example DRH or DOE-OS.)

**Billing Code**: The TDEC billing code and cost center for purchase of laboratory services assigned to the various TDEC programs to which the analyses performed on a sample are billed. (*For example 327.36-90.*)

## Radiochemical Analysis Request Sheet (Continued)

**If Priority**, **Date Needed**: Must be filled out if the analytical results are needed by a particular date as determined by health effect emergency or program determined priority. ASAP is not appropriate.

**Send Report To**: The person and complete address of where the sample report should be sent.

**Sample Type**: Self-explanatory. If none of the listed matrices apply, complete the Other line.

**Field Comments**: Any comments that the sampler feels are appropriate concerning the sampling process.

**Air Samples Volume/Total Hours**: Applies only to air filter samples. The volume with appropriate units is required for radiochemical analysis.

**Sample Filtration/Sample Acidification**; Instructs laboratory personnel as to the proper handling of water or liquid samples.

**Requested Analyses: Self-explanatory**. The sampler chooses the desired analyses for the collected sample.

#### **Chain of Custody**

This is required by the TDEC Office of General Counsel for samples that have the potential of being use in court, reviewed by state boards, or involved in state hearings. This entire area must be filled out completely to meet chain of custody requirements. All samples from all agencies must be submitted using the chain of custody forms and procedures.

- 1. The sampler signs his name in full in the **Collected By** space with the date and military time.
- 2. If the sampler gives the sample to anyone else before it is delivered to the laboratory, each person responsible by the sample must sign their full name on the **Received By** space with the date and military time. The person in the laboratory who receives the sample will sign line 4.

#### **Additional Information**

Completely fill out all the information under Additional Information including:

- 1. Approximate volume of sample.
- 2. Nearest town or city.
- 3. Others present at collection.
- 4. Number of other samples collected at the same time at this point.
- 5. Field collection procedure, handling, and/or preservation of this sample (can write SOP if a written SOP was followed).
- 6. Mode of transportation to the laboratory (state vehicle, bus, UPS, etc.).
- 7. Sample/cooler sealed by.
- 8. Date sample/cooler sealed.
- Remarks.

## State of Tennessee - Environmental Laboratories

# Radiochemical Analysis

PLEASE PRINT LEGIBLY

PROJECT/SITE NO. PROJ	ECT NAME		
	COUNTY		Laboratory Number
DESCRIPTION		<u> </u>	
STREAM MILE DEPTH		<del></del>	<del> </del>
COLLECTED: DATE TIME		<u>and the second </u>	Date Received
PICK-UP DATE:		**************************************	Duto 1.cocited
	mR/hr Reading		Time Received By
SAMPLER'S NAME (printed)	The state of the s		Time Received
	VG CODE		
SEND REPORT TO:		Chain of Custody and Supplemental Information Only one chain of custody form is required per sample	
SEND REPORT TO.			
			set or point (if all collected at the same time)  1. Collected by
	<u> </u>		Date Time
Sample Type	Field Comments:	Air Samples	Delivered to
Air Milk Swipe			Date Time
WaterTissueLiquid		Total Hours	2. Collected by
Sludge Soit Solid Vegetation Sediment			Date Time
VegetationSediment		Sample Filtration	Delivered to  Date Time
		Sample Acidification	3. Collected by
Other		Send to RESL	Date Time
E STATE OF THE STA			Delivered to
DEGUEGTED ANALYOPS			Date Time
REQUESTED ANALYSES:			4. Received in Lab by Date Time
GROSS ALPHA (TOTAL)	STRONTIUM 89		Logged in by
			Date Time
GROSS ALPHA (SUSPENDED)	STRONTIUM 90		
GROSS ALPHA (DISSOLVED)	TRITIUM (H-3)		Additional information  1. Approximate volume of sample
GROSS ALFTIA (DISSOCVED)	TRATION (TPS)		2. Nearest town or city
GROSS BETA (TOTAL)	THORIUM (TOTAL)	· . ·	3. Others present at collection
GROSS BETA (SUSPENDED)	URANIUM (TOTAL)		Number of other samples collected at same time at     this point
GROSS BETA (DISSOLVED)	GAMMA RADIONUCLIDES		5. Field collection procedure, handling and/or
			preservation of this sample
	ADDITIONAL ANALYSES:		
			6. Mode of transportation to lab
	<b></b>		7. Sample sealed by
			8. Date sample sealed
			9. Remarks
			<u> </u>
PH-3009 (rev 2/98)			RDA 152

## **Asbestos Analysis**

**INTRODUCTION** - Because of health hazards associated with breathing asbestos fibers, the use of asbestos in building materials has been severely limited in the last several years. However, it is still a concern in older buildings, especially those undergoing renovation or demolition. The State Laboratory maintains certification through the National Voluntary Laboratory Accreditation Program (NVLAP) for the analysis of asbestos in bulk building materials. The laboratory can also analyze unusual samples, such as dust, for major constituents like cloth fibers, pollen, mold, or other materials, as well as asbestos.

**SAMPLE COLLECTION** - Collect a representative sample of material to be examined. Each sample must be placed in a clean individual container such as a film canister or prescription bottle. Small plastic zip-lock bags may also be used. Label the container to clearly identify the sample by date, location, field number, or other identifiers. Collection kit materials and requisition forms are available from your nearest state laboratory.

**DOCUMENTATION** - Use the Inorganic Analysis Form PH-3011 (see page VI-13) and indicate in the "other" column which test is to be performed. Be sure to complete all shaded areas of the form as well as the chain of custody portion if required.

**SUBMITTING SAMPLE** - Samples for asbestos or other microscopic examination may be submitted through any of the State Laboratories. They will be forwarded to the Knoxville Laboratory, where all testing is performed. If sending by mail or commercial courier, send directly to the Knoxville Laboratory. All samples must be submitted through state agencies that maintain a contract with Laboratory Services.

Knoxville Branch Laboratory
Tennessee Department of Health
1522 Cherokee Trail
Knoxville TN 37920

Phone: 423-519-5201 Fax: 423-594-5199

## **EXAMPLE OF TESTING AVAILABLE**

TESTS PERFORMED	TYPE OF REPORT	TYPICAL SAMPLES TO SUBMIT FOR TESTING
Asbestos, complete	Analysis of all materials listed by constituent and percent.	Bulk insulation material Loose fill insulation Spray on insulation Pipe and boiler wraps Rolled insulation Roofing material Flooring material Plaster-like material
Asbestos, limited	Percent and type of asbestos only.	Same as above
Other Microscopic	Type and estimated percent of predominant material. Asbestos will be reported if found.	Dust Miscellaneous fibers Other unusual samples (call the lab before sending)